

## WEATHER OF THE MONTH.

## WEATHER OF NORTH AMERICA AND ADJACENT OCEANS.

## GENERAL CONDITIONS.

By A. J. HENRY, Meteorologist.

The annual reversal in normal pressure in the Northern Hemisphere is almost accomplished by the close of May.

The great Asiatic high of winter has now disappeared and the normal pressure is highest over the Atlantic southwest of the Azores. Normal pressure is also high over the Pacific northeast of the Hawaiian group although the principal high is over the Atlantic, as above stated. Normal pressure is now least in equatorial regions, the principal depression being over British India with values as low as 29.60 inches. Normally there is an increase in pressure from April to May in both the Iceland and Aleutian regions of low pressure, hence both these regions are no longer to be considered as being under cyclonic control.

As far as can be determined at this writing the weather in the Northern Hemisphere for May, 1919, did not depart in any important respect from the normal for the season. The greatest abnormality observed was that of the prevailing low pressure in Alaska and other northern regions when the normal change is toward rising pressure.

## NORTH PACIFIC OCEAN.

By F. G. TINGLEY.

Pressure was almost continuously, and at times markedly, below normal in the region of the Aleutian Islands until the closing days of the month. On the other hand, at Midway Island it was above normal except from the 8th to the 13th. Along the northern trans-Pacific steamer routes this pressure distribution resulted in the prevalence of westerly winds in midocean which at times attained gale force. Otherwise the weather of the month appears to have been without special features.

## NORTH AMERICA.

By A. J. HENRY.

May, 1919, was lacking in positive characteristics, cyclonic and anticyclonic movement was sluggish and featureless. On the whole, it was a month of more than the average rainfall east of the Mississippi and in the West Gulf drainage. The abundant rainfall east of the Mississippi was associated with temperature below normal except locally in small areas. West of the Rocky Mountains unusually high temperatures prevailed.

So far as known, the month was devoid of destructive local windstorms and tornadoes.

## NORTH ATLANTIC OCEAN.

By F. A. YOUNG.

According to reports received from land stations on the American coast, the Azores, Bermuda, and the British Isles, the mean pressure for the month over the North Atlantic did not differ materially from the normal, although not enough vessel reports were received in time to determine the conditions accurately.

In an article by Mr. Willis Ray Gregg on "The First Trans-Atlantic Flight," that appears in this number of the

REVIEW (p. 279-292), the weather conditions from May 12-20 and from the 27th to the 31st (both inclusive), are discussed, the article being accompanied by a series of charts showing the pressure distribution and direction and force of wind over the ocean for each day in both periods.

On May 1 a well-developed LOW was central near Sydney, Cape Breton Island, and moderate westerly gales were encountered between the center and the 40th parallel; during the next 24 hours the barometer rose rapidly at Sydney, and the LOW apparently moved northward, as on the 2d it did not appear within the limits of the chart, while the winds over the storm area of the 1st had decreased considerably in force. On the 3d the weather was moderate as a whole, with the exception of a limited area in midocean, where winds of from 40 to 45 miles an hour were reported, while fog covered the greater part of the Banks of Newfoundland.

From the 4th to the 8th, moderate winds were the rule, except that on the latter date, the observatory at Horta, Azores, recorded a southwesterly wind of 40 miles an hour, while at the same time snow occurred at St. Johns, N. F.

On the 9th there was a well-developed Low central near latitude 46°, longitude 35°, and strong southerly gales prevailed in the easterly quadrants, while westerly winds of slightly less force were encountered a short distance west of the center.

The observer on the British Steamship *Malancha* stated in the storm log: "The gale began on the 9th, lowest barometer 28.57 inches at 4 p. m. on the 9th, latitude 48°-36'N, longitude 32°-58'W. End of gale on the 12th; highest force of wind 70 miles an hour; shifts of wind near time of lowest barometer, south to south-southwest to west to north-northwest."

The U. S. S. *Huntington* was some distance southwest of the center on the morning of the 9th, and an extract from the storm log is as follows: "Gale began on the 8th; lowest barometer 29.15 inches at 4 a. m. of the 11th, latitude 45°-13'N; longitude 32°-45'W; end of gale on the 13th; highest force of wind 64 miles an hour; wind shifted from southwest to west by north on the 9th and from west to southwest by west on the 11th. Barometer started rising and reached 29.66 inches with signs of storm center having passed at noon on the 9th; then the barometer again began to fall and later there was a slight shift of wind to left with increasing force; intermittent rising and falling barometer until 6 a. m. on the 12th, when steady rise began."

On the 10th and 11th this disturbance remained in nearly the same position as on the 9th, with but slight diminution in the force of wind, while on the 11th hail was reported in the southwesterly quadrants.

The weather maps, May 12-20 (Charts IX-XVII) show the conditions prevailing on these days.

From the 21st to the 26th the atmospheric circulation was comparatively sluggish over the greater part of the ocean, and fog occurred on the Banks of Newfoundland and off the European coast on several days during this period. There were exceptions to these conditions, however, as on the 22d a vessel about 5 degrees east of Horta, Azores, as well as the observatory at that place registered southwesterly gales of over 60 miles an hour, while another vessel near latitude 47, longitude 23, also experienced heavy weather on that day.

The weather of the last few days is shown on the weather maps of the North Atlantic, Charts XVIII-XXII.